# The relationship between spot and futures prices : evisence in gold market

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## ABSTRACT

This study, applying a threshold vector error correction (TVECM) model, examines whether gold spot and futures prices are cointegrated relationships. By using this methodology we are able to evaluate the degree and dynamics of transaction costs resulting from various market imperfections. Traction costs may lead to the existence of neutral band for futures market speculation in which profitable trading opportunities are impossible. We use data set that comprises daily data of spot and futures prices for gold market. The principal source is DataStream, covering the period from 16th Oct. 2004 to 23rd Dec. 2010 that is 1622 observations in total. In the process of proving that, first we examined whether the unit root of the two variables of gold futures and spot was in the steady state. The result came like this: the both sequences over by first differenced were I(1). And then, it showed long-run equilibrium between gold futures and spot prices by Johansen Cointegration test . Furthermore, this paper employs the threshold VECM to investigate the dynamic price relationship between gold futures and spot. The results provided by the SupLM test statistics reject the null hypothesis of no threshold effect. Whereas the Wald test diagnostics, thus the null hypothesis of linearity in error correction terms is rejected. Finally, we found that gold futures and spot prices were out of long-run equilibrium whether is in symmetrical or asymmetrical model. Thus, gold spot prices will adjust the short-run price to reverse back to the long-run equilibrium.

Keywords : threshold vector error correction model　Johansen Cointegration test　asymmetry　nonlinear

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